

1	UNITED STATES DISTRICT COURT
2	DISTRICT OF NEW HAMPSHIRE
3	
4	SECURITIES AND EXCHANGE) Civil Action No. COMMISSION,) 1:21-cv-00260-PB
5) Plaintiff,) VOLUME 1
7	vs.) (Pages 1 to 339)
8	LBRY, INC.,
9	Defendant.)
10	
11	
12	CONFIDENTIAL DEPOSITION OF
13	DR. BORIS RICHARD
14	VIA WEBEX VIDEOCONFERENCE
15	Wednesday, March 30, 2022
16	
17	
18	
19	
20	
21	
22	
23	REPORTED BY:
24	ELBIA BAIRES
25	JOB NO. 220330LHR
	1

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1
         Α.
               Yes.
                     It said publicly in very many
 2
    details -- in a very -- in a very kind of
 3
    exhaustive way of what they have done. Which
 4
    features are working, which features are in the
 5
    development.
 6
               So they provided very detailed
7
    updates on their efforts and on the deployment
8
    and the functionality of the components of
9
    their ecosystem.
10
               Okay. But listen carefully to my
         Q.
11
    question, Dr. Richard.
12
               For your opinions in Exhibit --
13
    excuse me, in paragraphs 11 and 13, did you do
14
    anything, you or your team, do anything other
15
    than review and summarize LBRY's public
16
    statements?
17
               MS. MECHANIC:
                              Objection.
18
         Α.
               That's a fair statement.
19
               Okay. That's what you did?
         Q.
20
               That's what I did, yes. A very
         Α.
21
    detailed review --
22
         Q.
               Got it.
23
               -- of information provided by LBRY,
         Α.
24
    Inc.
25
               In paragraph 13, you write, "LBRY
         Q.
                                                            119
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1	everybody to be equivalent to removing certain
2	transactions stored on a blockchain.
3	Q. So your testimony
4	A. I'm just rephrasing the removal of
5	transactional records, by relabeling it and
6	calling it on-chain activity in footnote 76.
7	Q. Let me see if I understand your
8	testimony, Dr. Richard.
9	Are you telling me that you did not
10	need to mention this part of your methodology
11	because it was generally understood that that's
12	what you were doing?
13	MS. MECHANIC: Objection.
14	A. I included footnote 76 to focus and
15	to show the source which we used to identify
16	the activity to be removed. I did not intend
17	footnote 76 as an additional alternative
18	description of the methodology that was used to
19	remove certain on-chain activity.
20	It was designed specifically to
21	refer the reader to the sources that we used to
22	identify that activity to be removed.
23	Q. But, Dr. Richard, one of the sources
24	that you used for your report is a list of

wallets that you received from LBRY, correct?

25

1	A. That is correct.
2	Q. And you do not disclose that list of
3	wallets anywhere, correct?
4	MS. MECHANIC: Objection.
5	A. Yeah, it appears not to be disclosed
6	in the report.
7	Q. Okay. Was it was that list of
8	wallet addresses key to the analysis that you
9	did in your report?
10	MS. MECHANIC: Objection.
11	A. The address the the addresses
12	that we know to be affiliated with LBRY is used
13	to identify the the list of transactions to
14	be removed from the on-chain activity to
15	capture the user related on-chain activity.
16	So I would put it this way, we did
17	more than just removing the operational
18	activity of the three premine funds. We I
19	was more conservative in this approach. So
20	therefore, in addition effectively in
21	addition to removing all the on-chain
22	activities of the three premine funds by the
23	LBRY, we also removed additional transactions
24	that were somehow in any way affiliated or
25	associated with the LBRY addresses.

1	So we did a double-check	
2	double-check and we wanted to remove and be	
3		
	conservative in estimating the non-affiliated	
4	economic activity on-chain for the LBRY	
5	network.	
6	Q. So, Dr. Richard, am I understanding	
7	you right that you removed more than you said	
8	you removed in paragraph 68?	
9	MS. MECHANIC: Objection.	
10	A. Yes. We removed we removed a	
11	large amount of activity. That's correct.	
12	Q. Okay. And if I wanted to recreate	
13	your methodology based on your description of	
14	how you determined on-chain transaction	
15	activity, how would I do that?	
16	A. There are two ways there are two	
17	ways that you could do it. The first one, the	
18	transaction records provided by LBRY as they	
19	pertain to the three premine fund, those	
20	records, they have transaction hashes. So you	
21	can go directly to the blockchain explorer and	
22	identify those transactions.	
23	In fact, the tokens the number of	
24	tokens transferred and the purpose of that	
25	transfer is is listed in in those records	
		155

```
1
   anyway.
2
               In addition, you can identify
 3
   transactions to be removed on-chain if you have
 4
   a list of addresses. You just -- you go to
 5
   the -- if you don't want to use
    sequel-structured approach the way we use it,
 6
7
   you can go to the LBRY blockchain explorer,
   type in an address and it will give you the
8
9
   history of transactions associated with that
10
   address.
11
               Including the tokens. Including the
12
            Including the destination address.
13
   you just remove that from the -- from the
14
   on-chain activity.
15
         Q.
               Dr. Richard, you can't do that
16
   unless somebody tells you that that particular
17
   wallet address is associated or controlled by
   LBRY, correct?
18
19
               MS. MECHANIC: Objection.
20
               You need to know if -- if the
         Α.
   LBRY -- if -- if a particular address is -- is
21
22
   affiliated with LBRY, Inc. Yes.
23
               So without the list of wallet
         0.
24
   addresses that you deducted, I cannot reproduce
25
    your results, correct?
```

1	MS. MECHANIC: Objection.
2	A. You can you can reproduce you
3	can reproduce a large portion of it. Because
4	those transaction hashes that are are in the
5	call it credit reports, you don't need to
6	know addresses for those. But it's addition
7	transactions that are affiliated with another
8	12 addresses, yes, you do these those 12
9	addresses.
10	Q. Were the addresses that you received
11	from LBRY prior addresses that LBRY used for
12	the three funds or just the ones it was
13	currently using?
14	A. I cannot
15	MS. MECHANIC: Can you repeat that?
16	Our audio cut out.
17	MR. JONES: I'm sorry. Sometimes if
18	I look away for a minute, the audio might be a
19	problem. Or maybe it's on your end. But let
20	me try it again.
21	Q. Were the wallet addresses that you
22	received from LBRY prior addresses that LBRY
23	used for the three funds or just the current
24	addresses they were using for the three funds?
25	MS. MECHANIC: If you know.

1 the entire time period. 2 Q. And what is the conclusion that you 3 wish people to draw from Exhibit 8, 4 Dr. Richard? 5 MS. MECHANIC: Objection. 6 My conclusion -- my conclusion is 7 that the majority of users were using the LBC 8 token in a framework of on-chain transactions to execute non-investment transactions that 9 10 involved consumption and delivery and -- and 11 other ways of sharing the information as part 12 of the services provided by the LBRY network as 13 opposed to, you know, getting the token, going 14 to an exchange and selling it for profit. 15 Q. What's the ratio that you needed to 16 find in your last -- in your rightmost column in Exhibit 8 in order to draw that conclusion? 17 18 MS. MECHANIC: Objection. 19 Α. There is no preconceived notion of 20 where that ratio should be. I mean, the ratio 21 of two, roughly two, tells you that in a much 22 bigger fraction of transactional activity 23 overall, it happened on-chain as opposed to 24 trade and selling on trading venues.

25

0.

186

Well, would you come that same

1	conclusion if you were only looking at 2016
2	through 2019?
3	A. If if you look at a particular
4	subcomponent, yes, there are there are years
5	where the market trading activity exceeded the
6	on-chain activity. But
7	Q. Okay. And
8	A. But it's not what's driving my
9	expert statements in the report.
10	Q. Well, it's not? Those don't
11	well. Do those have any effect on your expert
12	statements in the report?
13	A. I mean, they do implicitly because
14	eventually they feed into the overall ratio
15	that that is reported as 2.04. So it may it
16	could have been that those three years could
17	have seen much bigger secondary market trading
18	volume and that would have depressed the
19	overall ratio for an aggregate period.
20	You know, my conclusions would have
21	changed if I looked at a different overall
22	ratio over the six-year period.
23	Q. If I had asked you to do the same
24	analysis at the end of 2019, what would your
25	conclusion have been?

1	MS. MECHANIC: Objection.
2	A. I did not do I did not do that
3	computation. And again, my so I don't want
4	to speculate at this point. My conclusion's
5	based on the totality of the information that I
6	have available to me. That includes 2021
7	through 2021.
8	Q. Well, the totality of information
9	includes 2016 through 2019 as well, right?
10	A. That is correct.
11	Q. Is there any reason why you couldn't
12	just total up the values for 2016 through 2019
13	in columns A and B and come up with a ratio in
14	the same way that you do in your total column
15	at the bottom of your chart?
16	A. I mathematically and
17	arithmetically, I could. But to the extent
18	that it's not feeding it's not the basis for
19	my expert conclusion, I didn't do it.
20	Q. Well, I understand.
21	But you've presented your data here,
22	correct, Dr. Richard?
23	A. The table does that, yes.
24	Q. And you are saying that your
25	conclusion is based on this total line at the

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1
   bottom of Exhibit 8, correct?
 2
         Α.
               That's correct.
 3
               And your methodology is essentially
         0.
 4
    to look at each individual year and measure
 5
    column A versus column B and then sum that
 6
    across the time period that you're looking at
 7
    and develop a ratio based on that, correct?
 8
               Can you repeat the question? I'm
         Α.
9
    sorry.
10
         Q.
               Right.
11
               So you look at the -- the data for
12
    each of the years 2016 through 2021, correct?
13
               I'm reporting it as if it's part of
14
    the -- I'm recording it because it's simply
15
    part of my analysis, yes.
16
         Q.
               Right.
17
               So my question is, is there
18
    anything -- let me ask it a different way.
19
               Dr. Richard, is there anything
20
    that's sort of key to the fact that you are
21
    looking at six years here versus looking at,
22
    you know, the ability to look at four years or
23
    five years? Is six years a magic number
24
    somehow?
25
               MS. MECHANIC:
                              Objection.
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1 It is not a magic number. The 2016 Α. 2 is based on the fact that this is when the LBRY 3 blockchain became -- became functional. So you 4 cannot talk about any on-chain transaction 5 activity of volume if blockchain is not 6 working. 7 So you have to pick a start time 8 when -- when -- when a blockchain 9 becomes functional. So that's the starting 10 point. The end point of 2021 is driven by the 11 fact that in terms of the full years, we have 12 data on the LBRY blockchain network operations 13 through -- through 2021. 14 Dr. Richard, based on your data in 15 Exhibit 8, does the -- does your conclusion 16 change over time about whether or not LBC are 17 being used for the economic uses on the 18 blockchain versus for investment purposes? 19 MS. MECHANIC: Objection. 20 Again, my expert conclusions are not Α. 21 reported on a year-by-year basis. But I do --22 I do believe that I might offer -- I might have 23 offered some explanations as to why this ratio was low in 2017, 2018. 24 25 Did you offer any --Q.

1	A. So	
2	Q on your I'm sorry,	
3	Dr. Richard. Go on.	
4	A. Yes. So my overall conclusions in	
5	the report is is based on the results	
6	obtained for the aggregate for a six-year	
7	period. It happens to be a six-year period.	
8	Q. So if the ratio was less than 1.0,	
9	would your conclusion change?	
10	MS. MECHANIC: Objection.	
11	A. If if the ratio was 1.0, I would	
12	have said that roughly half of the activity is	
13	related to non-investment on-chain activity	
14	related to the consumption and exchange of	
15	information in a decentralized way. And the	
16	other half is driven by, you know, people	
17	trading the cryptocurrency on the secondary	
18	market platform.	
19	Q. If the ratio was 0.5, what would you	
20	have said? Or what would be the conclusion	
21	based on that?	
22	MS. MECHANIC: Objection.	
23	A. I would have I would have said	
24	that the secondary market trading activity	
25	seems to dominate the on-chain transaction	
		191

1	volume.
2	Q. Would it be correct to say that in
3	2017 and 2018, the secondary market trading
4	dominated on-chain transaction volume?
5	MS. MECHANIC: Objection.
6	A. That's what the data shows in this
7	particular table, yes.
8	Q. Okay. Are there any other inputs
9	into the ratio that you are presenting here
10	other than the data in this table?
11	A. The ratio is just the ratio in
12	the rightmost column is just computed as the
13	ratio of the number in the second column over
14	the number in the third column.
15	So you see all the inputs for the
16	computation for the arithmetic computation
17	of this ratio in this table.
18	Q. Okay. Did you make any adjustments
19	to the secondary market trading volume that you
20	are listing here?
21	A. What do you mean by "adjustments"?
22	If I may ask.
23	Q. Previously testified that you
24	adjusted the amount of on-chain transaction
25	volume to try to eliminate LRRY wallet

1	addresses, right?
2	MS. MECHANIC: Objection.
3	A. I did adjust on-chain transaction
4	volume by remove the LBRY, Inc. related
5	transactions on-chain, yes.
6	Q. Did you remove any transactions
7	from from the data in column B?
8	A. No. No, I did not.
9	Q. Okay. You didn't back out any
10	trading that LBRY may have done itself?
11	MS. MECHANIC: Objection.
12	A. No.
13	Q. Okay. What type of activity is
14	considered on-chain network activity?
15	A. Generally speaking, any transfers of
16	cryptocurrency between addresses is recorded on
17	a blockchain, appended to a block and validated
18	by the validator. That's what so any
19	transfer of token is considered is
20	considered an on-chain activity.
21	Q. Okay. Some of those transfers of
22	tokens are not the economic uses for LBC that
23	you detail in your report, correct?
24	MS. MECHANIC: Objection.
25	A. Can you can you clarify your
	193

1	your question, please.
2	Q. Sure. Let me give you a for
3	example.
4	Let's say there's a wallet address
5	and the person who controls that wallet address
6	wants to split it into two wallets.
7	Is that the economic uses of LBC
8	that you are talking about in your report?
9	A. Generally, no.
10	Q. Okay. What if there is a wallet
11	address and the person who controls that wallet
12	address just wants to transfer it to a
13	different wallet address.
14	Is that part of the economic uses
15	that you are detailing in your report?
16	MS. MECHANIC: Objection.
17	A. It it might be. But it might be
18	not. So depends on the purpose of that split.
19	Q. Okay. So, for instance, if if
20	someone had a wallet address and they said oh,
21	I'm a little worried about the security of this
22	address. I'm going to transfer it to another
23	address.
24	Would that be an economic use of
25	LBC?
	1 0 /

```
1
               MS. MECHANIC: Objection.
2
   Objection.
3
               Can you repeat the question?
         Α.
 4
    sorry.
            I missed it.
5
               I can try.
         Q.
               If someone had a wallet address and
 6
7
   became concerned about the security of that
8
   wallet address and transferred those LBCs to a
   different wallet address, would you consider
9
10
    that as one of the economic uses of LBC?
11
               MS. MECHANIC: Objection.
12
               General speaking, if it's a
13
    security-related concern and it's not related
14
    to the consumption of or sharing of the
15
    information, I would probably call it non --
16
   non-consumptive use of that.
17
         Q.
               Okay.
18
               Albeit, again, who knows.
19
   person might be planning to create a new
20
    channel into what he wants to associate that
21
   particular channel, you know, with a particular
22
   address.
23
               So who knows. It depends on the
24
   ultimate goal of that user. If he wants to
25
    receive tips for that particular channel,
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1 contributions to a particular address that's 2 different from the original, could he do that, 3 possibly. 4 Q. If that person that wanted to create 5 a channel, that would be a separate blockchain 6 activity, right? That would be a separate transaction on the blockchain? 7 That would be -- yes, that would be 8 Α. 9 like creating a new claim on the LBRY 10 blockchain. 11 So you'd be capturing that whether 12 or not you included the transfer from one 13 wallet to another? 14 MS. MECHANIC: Objection. 15 It would be -- it would be included Α. 16 on-chain, yes. 17 Did you do anything, Doctor, to --18 to deduct from the on-chain transaction volume, transactions that were unrelated to the 19 20 economic uses of LBC? 21 Α. Put it this way, we -- I removed 22 obviously on-chain transfers that were related 23 to LBRY. Right. And we talked about it 24 They may be some transactions that are 25 not related to using or exchanging information.

1	So yeah, there may be some that	
2	that are sitting in the on-chain transaction	
3	volume.	
4	Q. And those transactions would not	
5	reflect the sort of end-user use of LBC as, you	
6	know, for a video sharing platform, correct?	
7	MS. MECHANIC: Objection.	
8	A. I mean, hypothetically, yes. But	
9	hypothetically speaking, yes. But many of the	
10	non-consumptive uses of LBC token are enabled	
11	within you know, they are enabled within the	
12	wallet. So that may not that would be	
13	cheating the cryptocurrency exchanges.	
14	Q. Okay. Well, let's actually talk	
15	about exchanges.	
16	If a person who had a wallet address	
17	transferred their tokens from the wallet	
18	address to a digital trading platform, would	
19	that cause an on-chain transaction to be	
20	recorded?	
21	A. If you transfer a token from one of	
22	your addresses to an address at an exchange,	
23	that would be recorded on-chain, correct.	
24	Q. Okay. And I take it would you	
25	agree that that is not one of the economic uses	
		197

1 of LBC that you are trying to capture with 2 on-chain transaction volume? It may or may not be. If, for 3 Α. 4 example, you are content publisher and you 5 received a lot of tipping, a lot of tips, and you want to unlock some of those received tips 7 and, you know, convert the LBC tokens into let's say Tether and you transfer it to an 8 9 exchange to sell, is that related to an 10 economic activity, yes, it is. 11 You are taking the compensation that you received for your informational service on 12 13 the on-chain, you just want to monetize it and 14 convert it into different currency. 15 Q. What about a transaction like that 16 that's unrelated to a content creator? Let's 17 say someone just buys LBC, has it in a wallet 18 address on the blockchain and then wants to 19 transfer it to an exchange to be traded. 20 Would you consider that the economic 21 activity on the LBRY network? 22 MS. MECHANIC: Objection. 23 I -- I would say there may be --Α. 24 there may be transactions like this. 25 possibility.

1	Q. Well, can an investor who wants to
2	invest in LBC buy it on-chain instead of on the
3	exchange?
4	MS. MECHANIC: Objection.
5	A. Typically, purchases and trades in
6	tokens occur directly on secondary market
7	tradings.
8	Q. Did you do anything to deduct the
9	transfers on-chain from a wallet address to an
10	exchange?
11	MS. MECHANIC: Objection.
12	A. I did not. But again, as I said,
13	in in my experience, most of the secondary
14	market trading activity happens primarily on
15	and around the trading venues.
16	It's just so the you know, the
17	valid reason why somebody would transfer tokens
18	from their LBC in-app wallet is to monetize the
19	compensation that you received for your
20	informational services.
21	Q. But
22	A. Typically typically, what happens
23	if you want to buy some if you wanted to buy
24	a token on the secondary crypto exchange, you
25	go to you create an account. You transfer

1 whatever cryptocurrency or, you know, quite 2 often, the feed of currency onto that exchange and you just buy. 3 4 You -- you just buy that -- you 5 know, using the order book that -- that you 6 are, you know, seeing on the screen of your 7 exchange application. So in most cases, that's not 8 9 reflected on-chain. Because an exchange of fee 10 or cryptocurrency and then the trading happens 11 in the offset -- in the off-chain setting of the exchange. 12 13 What's your basis for saying that, Q. 14 Doctor? 15 Α. What is the basis of saying -- this 16 is -- this is based on looking at the activity 17 based -- and the activity and understanding the 18 way -- the way the crypto exchange is -- the 19 centralized crypto exchanges are set up. 20 In looking at your data, Dr. 21 Richard, is there any way to tell the 22 difference between when a person is cashing out 23 their LBC because they received it for 24 video-related purposes or a person is cashing 25 out their LBC because they'd like to sell it

1	for investment purposes?
2	MS. MECHANIC: Objection.
3	A. There is no really way to to
4	distinguish between those two types of
5	transactions.
6	Q. So is what you just told us about
7	when people use exchanges based on sort of your
8	general knowledge about blockchain?
9	A. General general expertise, yes.
10	Q. Have you ever seen actual data that
11	explains how often someone is buying on-chain
12	versus off-chain to invest in a particular
13	crypto token?
14	MS. MECHANIC: Objection.
15	A. No. I've been looking at I've
16	done, you know, several types of
17	investigations. So and I've dealt with
18	records showing how the cryptocurrencies were
19	purchased.
20	So it is it is quite common to
21	purchase and trade the cryptocurrency directly
22	on the exchange. But it is true that larger
23	investors, especially the ones who self-custody
24	their own tokens, they might engage into
25	on-chain transactions before transacting on an
	201

1	exchange.
2	Q. Did you do anything to deduct the
3	volume for those type of wallet holders from
4	your on-chain transaction volume?
5	A. Can you repeat the question again?
6	I'm sorry.
7	Q. Yes.
8	Did you do anything to deduct the
9	volume of the type of users you are talking
10	about who do large on-chain transactions from
11	the on-chain transaction volume you are
12	reporting here in Exhibit 8 7 and 8?
13	A. Generally speaking, the the
14	transaction amounts that occur on that occur
15	on-chain within the LBRY ecosystem, they're
16	small transactions. Because they are dealing
17	with, you know, sharing information,
18	publishing, uploading, downloading, tipping.
19	I would not I don't believe that
20	any large investor would any larger investor
21	would use the platform as a tool to store
22	their to store their LBCs and then transfer
23	them to the exchange to sell.
24	Q. Are you familiar with mining pools,
25	Dr. Richard?

1	MS. MECHANIC: Objection.	
2	A. If can you repeat the question	
3	again? I'm sorry.	
4	Q. Sure.	
5	If Exhibit 147, the on-chain	
6	transaction data, does not deduct all of the	
7	LBRY wallet activity, would that introduce	
8	error into the results of your reporting in	
9	Exhibits 5A, 5B, 6, 7A and 7B?	
10	MS. MECHANIC: Objection.	
11	A. If if we missed some of the LBRY	
12	related activity, that's correct.	
13	Q. Okay.	
14	A. It could it could introduce some	
15	error.	
16	Q. And does the the concept that the	
17	whole wallet amount is transacted on-chain,	
18	does that throw off your on-chain transaction	
19	volume estimations for 5A, 5B, 6, 7A and 7B?	
20	MS. MECHANIC: Objection.	
21	A. In principle, it might. But I don't	
22	know the quantification of that particular	
23	impact.	
24	Q. Well, you you want your on-chain	
25	transaction volume to be measuring user	
		44

1	activity, right?	
2	A. I'm doing the best effort to do	
3	that, yes.	
4	Q. Right.	
5	If a user tips one LBC to a content	
6	creator, you want that to register as one LBC	
7	of volume, correct?	
8	MS. MECHANIC: Objection.	
9	A. That's that's correct. Yes.	
10	Q. So if if the transaction volume	
11	that the block is recording is actually a	
12	thousand LBC for that transaction because	
13	there's a thousand LBC in that user's wallet,	
14	your on-chain transaction volume for that	
15	transaction is off, correct?	
16	MS. MECHANIC: Objection.	
17	A. Well, it depends if it goes back to	
18	the change address or not. If it's a full	
19	amount, then there is no error. If there is a	
20	change address related, then one LBC recorded,	
21	that would be fair representation of the of	
22	the actual activity that happened.	
23	Q. Right.	
24	For that transaction, at least as	
25	you are saying, if it goes to a different	
	2.4.5	

```
1
   address, that's a thousand times off what you
2
   would want it to be?
3
               MS. MECHANIC: Objection.
               I'm not sure. I have to look at
4
         Α.
5
    some specific examples of -- of the
 6
   transactional activity related to particular
7
   users.
8
               But you would want it to be one? A
         Q.
   tip of one should be one on-chain transaction.
9
10
         Α.
               Ideally, yes.
11
               Okay. Well, ideally, and in order
         Q.
12
   to make the assumption that on-chain
13
   transaction volume is representative of user
14
   activity, correct?
15
         Α.
               I want to represent the user
16
   activity, yeah, to the best possible way.
17
   Correct.
18
         Q.
               Right.
19
               And to do that, you need your
20
   on-chain transaction volume to record the
21
   amount of transaction not the total amount of
22
   the wallet, correct?
23
               MS. MECHANIC: Objection.
               I definitely -- not the amount --
24
         Α.
25
   not -- not the balance of the wallet.
                                                            246
```

1	Q. Okay. Can I direct you to one	
2	second.	
3	Can I direct you to page 144,	
4	starting on line ten.	
5	A. Line ten	
6	Q. It's one that says 1218, then ten.	
7	A. I see line ten.	
8	Q. Can I have you read there to the end	
9	of the page.	
10	A. Yup.	
11	(At this time, the witness	
12	perused the aforementioned	
13	item.)	
14	A. Okay. I'm done reading.	
15	Q. Okay. And do you see there that	
16	that Mr. Kauffman is testifying, in fact, that	
17	he he he is asked whether there could	
18	potentially be more than a thousand wallet	
19	addresses associated with LBRY.	
20	And he says, "You can end up with a	
21	large amount of addresses with really small	
22	amounts of LBC in them," correct?	
23	A. Yes. I have read that.	
24	Q. All right. And so does the fact	
25	that there was potentially a large amount of	
		254

1 LBRY wallets a concern to you when you were 2 doing your analysis of the number of wallet 3 addresses? 4 MS. MECHANIC: Objection. 5 It is not a concern on my part. 6 Because, again, the -- the quantification and 7 the timeline of the address -- cumulative number of addresses is -- is -- only should be 8 taken in the context together with the analysis 9 10 that I performed later to show that the address 11 creation is -- is correlated and tracks in a positive way the additional functionality and 12 13 additional utility features that are available 14 to the users on the LBRY -- on the LBRY blockchain. 15 16 So secondly, I would also say that 17 if you look at the first exhibit, one of my 18 exhibits tracks the number of addresses with 19 non-zero balances of LBRY credits. And by the 20 end of the period, the number of those addresses is about 12 million. 21 22 And from -- from researching the 23 data, I do know that the number of users, let's 24 say by -- by December 2020, when the Odysee was 25 released, it was about 9 million.

```
1
               Can I have you bring up -- first of
         Q.
 2
    all, let me have you refresh the marked exhibit
 3
             I put additional marked exhibits in
    folder.
 4
    there.
 5
               But for now, I'd like you to bring
 6
    up and download -- download and bring up the
7
    spreadsheet that is Exhibit 142.
 8
         Α.
               Okay. I opened the spreadsheet.
 9
         Ο.
               And Exhibit 142 is the -- are the
10
    three worksheets that go with your Exhibits 11,
11
    12 and 13, correct? And, in fact --
12
         Α.
               Yes.
13
         Q.
               11, 12, 13 and 14.
14
         Α.
               Correct.
15
         Q.
               Could you open up the one that says
16
    "Utility T minus one to one"? On mine, it's
17
    the middle one.
18
         Α.
               Okay.
19
               You list a bunch of utility
         0.
20
    announcements here, correct?
21
         Α.
               Yes.
22
               What was your basis for choosing
         Q.
23
    these announcements for this analysis?
24
         Α.
               My criterion for choosing -- for
25
    choosing these announcements was if they
                                                            260
```

```
1
   related to some -- some features that were
2
   available or were becoming available to the
 3
   users of the LBRY data sharing network.
 4
                      And then going over to LBRY
         Q.
               Okay.
5
    team, you list a number of team announcements.
               What was your criteria for selecting
 6
7
    these?
               The criteria, I believe I list them
8
         Α.
9
    in the report. These are the announcements
10
    that relate to staffing changes that relate to
11
   LBRY, you know, publishing some performance
    summaries or recapping the -- the development
12
13
   or the road maps for the future development.
14
    Some partnership that may announce -- that the
15
   LBRY is going to partner with. You know, other
16
    types of initiatives.
17
               So again, these -- these are the
18
   ones that do not necessarily deal with utility
19
   upgrades or utility introductions that make
20
    additional user operations possible on -- on
21
   the data sharing network.
22
               Did you say you don't deal with
         Q.
23
    those?
24
               I'm sorry?
         Α.
25
               Did you say I do not deal with those
         Q.
                                                            261
```

1	or I do deal with those?
2	A. No. These these are the types of
3	announcements the ones that I call LBRY team
4	announcements are the ones that do not deal
5	with utility improvements or upgrades or either
6	functionality that is that's becoming
7	available to the user base which are
8	participating in the LBRY community.
9	Q. Okay. If you look at the LBRY News
10	web page starting on 7/6/16, there are 219
11	posts in total. You include about 55 unique
12	posts between Exhibit 11 and 13.
13	What was your basis for rejecting
14	the other three-quarters of the post from your
15	analysis?
16	MS. MECHANIC: Objection.
17	A. I chose in terms of the utility, I
18	did my best to select sort of important
19	upgrades and features that were announced
20	over over the course of the time.
21	And and in terms of the LBRY
22	team, again, I selected the ones that I could
23	clearly identify that they deal with sort of
24	strategy and and staffing changes and to the
25	extent that they you know, they encompass

```
1
   pretty wide range of dates. This is what I
2
   used to -- to do this analysis.
3
               Is it your opinion that the other
         Q.
4
   posts don't contain news that might potentially
   affect the price of LBC?
5
 6
               MS. MECHANIC: Objection.
7
               I have to -- I had to make a
8
    judgment. And my judgment was that these are
9
   the ones that should be used -- you know,
10
    should be used for this analysis.
11
         Q. Dr. Richard, you said you had to
   make a judgment.
12
13
               Why? Why couldn't you test all of
14
   the announcements?
15
         Α.
               Some -- some of them -- well,
16
   because I had to categorize them into two
17
   distinction categories. One of them are
18
   related to what I call LBRY team and others
   related to utility, utility over utility
19
20
    improvements.
21
               So I decided to test the ones that
22
   show up in these two exhibits.
23
               In fact, you could have tested all
         0.
24
    the announcements, correct?
25
               MS. MECHANIC: Objection.
```

1	A. Hypothetically hypothetically
2	speaking, yes.
3	Q. So what are the criteria that you
4	used to determine which ones were the important
5	announcements?
6	MS. MECHANIC: Objection. Asked and
7	answered.
8	A. I'm not saying that they are
9	important. I'm saying that these are the ones
10	that are analyzed and examined and determine
11	that they can be broken into the two categories
12	that I ran my analysis on.
13	Q. Dr. Richard, did you collect the
14	news for yourself or did you have one of your
15	team do it?
16	A. I used the team I used the
17	team of I used the team to help me to do
18	that, yes.
19	Q. And did the team give you all 219
20	posts or did they give you a subset of those
21	posts?
22	A. I do not I do not recall, to be
23	honest.
24	Q. You don't know whether they gave you
25	all of the posts or not?
	\circ

1	A. No, I do not.
2	Q. Who on your team pulled the posts?
3	A. One of the consultants.
4	Q. Which one of the consultants?
5	A. I believe Ismail Sheik was was
6	working on this assignment.
7	MS. MECHANIC: Marc, the 219 figure,
8	are you representing that's the number of posts
9	or is there a website we should be looking at?
10	MR. JONES: Well, I'm not
11	introducing the website at this point. But I'm
12	looking at the LBRY News web page, starting
13	from 7/6/16 forward.
14	MS. MECHANIC: Okay.
15	Q. Dr. Richard, who classified
16	important versus not excuse me.
17	Who decided which of the posts
18	posted on LBRY News web page would be analyzed
19	in your Exhibits 11 and 13?
20	A. I'm the one who reviewed it and
21	decided that I'm using it in my in my
22	analysis.
23	Q. Okay. But you just said that you
24	were not sure whether or not you received all
25	219 posts, correct?
	265

1	MS. MECHANIC: Objection.	
2	A. Yeah, I do not recall the specifics	
3	of that. I might have received I do know	
4	that I do know that I reviewed, you know,	
5	more more announcements that were that	
6	are part of this particular analysis.	
7	Q. And you rejected some?	
8	MS. MECHANIC: Objection.	
9	A. To the best of my recollection, I	
10	did.	
11	Q. Did you give your team any guidance	
12	on how to classify the posts?	
13	MS. MECHANIC: Objection.	
14	A. We had a discussion and I	
15	specifically I specifically told them sort	
16	of the criteria by which they should do sort of	
17	preliminary run and identify these	
18	announcements.	
19	So, for example, I said if the LBRY	
20	team announcements that are related to staffing	
21	changes, road maps, sometimes summary	
22	performances, some of the partnerships, they	
23	have to be definitely analyzed.	
24	And then I specified on the other	
25	hand, the announcements that deal with utility	
		266

1	upgrades, new versions, introductions of new
2	functionality, has to be classified as the
3	other one, in the other category.
4	Q. How many members of your team were
5	involved in classifying the news posts?
6	A. There was one member of my team
7	involved.
8	Q. And you only took news post from the
9	LBRY website, correct?
10	A. That is correct. Yes.
11	Q. What did you do to mitigate the
12	possibility that by only taking news from the
13	LBRY website, your analysis would suffer from
14	the selection bias of what LBRY chose to
15	publish and when it chose to publish it?
16	A. Can you repeat the question?
17	Q. Sure.
18	What did you do to mitigate the
19	possibility that by only taking news from the
20	LBRY website, your analysis would suffer from
21	selection bias of what LBRY chose to publish
22	and when it chose to publish it?
23	MS. MECHANIC: Objection.
24	A. I did not necessarily see any
25	selection bias. They thought the LBRY was

1 very clear about the upgrades and changes. And 2 they were always focused on delivering the new 3 functionality and the new utility to the 4 community. 5 So there was no reason for me to 6 believe that they would hide or hold back some 7 increment -- some incremental improvements or large improvements to their -- to their 8 9 blockchain. 10 So -- and based on, you know, my 11 review of their postings, they were also quite diligent about updating the community about 12 13 what they do in terms of the partnerships 14 and -- and staffing changes and other 15 initiatives that are not related to the utility 16 of the blockchain and the services that our 17 users have access to. 18 Dr. Richard, do you experience that 19 companies always publish -- voluntarily publish 20 the bad news about themselves? 21 MS. MECHANIC: Objection. 22 Α. I did -- I did not look at that 23 issue. And I don't see why -- how it's 24 relevant to this particular analysis. 25 0. Well, let me ask you this,

```
1
   measure of a -- of the statistical fit.
 2
         Q.
               Okay.
 3
         Α.
               Over particular -- over particular
 4
    regression model. So the -- it's the fraction
 5
    of the total variation and the variable that's
 6
    explained -- that's explained by the -- that's
7
    explained by the explanatory variable.
8
               Okay. So let's look about midway
         Q.
9
    through your report, can you go out to column
10
    GW.
11
         Α.
               GW?
12
         Q.
               G as in George, W as in water.
13
               MS. MECHANIC: Not Washington?
14
               MR. JONES: That would have been
15
    better, Rachel. Thank you. I'm in trouble
16
    because my sister went to GW.
17
               MS. MECHANIC: As did I.
18
         Α.
               Okay.
19
         Q.
               Okay.
                      What's the R squared in
20
    column GW?
21
         Α.
               .01.
22
         Q.
               So one percent?
23
         Α.
               That's correct.
24
               And does that mean for this
         0.
25
    estimation period, which goes between 11/7/2019
                                                            307
```

1 and 2/5/20, that the change in Bitcoin price 2 explains 1.3 percent of the change in LBC 3 price? 4 Α. Generally speaking, yes. 5 All right. And then going over to Q. 6 column GZ, there's two percent, correct? 7 Α. GZ -- yes. 8 Then going back to column GT, it's Q. 9 1.5 percent, correct? 10 Α. Yes. 11 So for these time periods at least, Q. 12 the change in Bitcoin price is explaining very 13 little of the variation in LBC price, correct? 14 MS. MECHANIC: Objection. 15 The Bitcoin -- the Bitcoin did --Α. 16 did explain very little of the LBC price token 17 performances. 18 All right. So if the Bitcoin 0. 19 change -- price change is explaining 20 two percent of the variation in LBC price, then 21 presumably, something else or a set of 22 somethings else is explaining the other 23 98 percent, correct? For that particular day, yes. 24 Α. 25 All right. You see there's also Q.

```
1
               Doctor, I'm asking, I think, a
         Q.
 2
    different question. And let me try to put it
 3
    to you another way. See if I can get at it.
 4
               Should your model remove the T minus
 5
    one day, the T day, and the T plus one day from
    the estimation window in order to remove the
 6
 7
    effect of the announcement from the results in
8
    the estimation window?
9
               MS. MECHANIC: Objection.
10
         Q.
               Do you know, Doctor?
11
         Α.
               Yes.
12
         Q.
               Did you say yes?
13
         Α.
               I said yes. Yes. Yes. Yes.
14
               So if you look down column G as in
         Q.
15
    George, V as in Victor, and you look down to
16
    column -- row 45, you see 12/12/2019?
17
         Α.
               Which tab are we looking at?
18
         0.
               The regression prep tab.
19
         Α.
               Okay.
20
               All right. So you see that in line
         Q.
21
    45 GV as in Victor 45, it has 12/12/2019?
22
         Α.
               Yes, I do.
23
               And then the next row has
         0.
    12/14/2019?
24
25
         Α.
               Yes.
                                                            313
```

1	Q. So does that tell you that when you
2	made this model, you and your team only removed
3	the day of the event and not the day before or
4	after?
5	MS. MECHANIC: Objection.
6	A. I'm not I'm not sure sitting and
7	looking at this right now because I see other
8	entries where two days were reviewed. So I
9	have
10	Q. Two days seeing reviewed.
11	A. Well, for example, 12/18/2019, and
12	then the next one is 12/21/2019.
13	Q. Okay. So
14	A. There are two observations are
15	removed here. So sitting in this chair right
16	now, I can not tell you exactly why you
17	know, if if it was a three-day period
18	removed from this particular set up.
19	Q. You have your exhibits in front of
20	you, sir?
21	Actually, you don't even need
22	that
23	A. I just switched to
24	Q. Can you go to the announcements
25	worksheet in the same Exhibit 143?
	314

1	A. Yes. Okay.
2	Q. And you see here looking at in rows
3	61 and 62 the reason that there are two
4	events, one on 12/19/19 and 12/20/2019, that
5	you are analyzing?
6	A. I do see that. Yes, I do see that.
7	Q. Right.
8	And so does that explain why there
9	are two days removed in in in the time
10	period we were just looking at in the
11	regression prep worksheet?
12	A. No. I'm not sure. I cannot I'm
13	not prepared to answer this question. As to
14	whether this particular event is related to the
15	fact that one observation was removed.
16	Q. So you don't know whether or not one
17	day was removed or three days was removed?
18	MS. MECHANIC: Objection.
19	A. Looking at this spreadsheet now, no,
20	I do not. My instruction that I gave was very
21	clear.
22	Q. But three days should have been
23	removed, correct? That was the clear
24	instruction that you gave?
25	A. I believe so, yes.

1	Q. And if you have not if your	
2	team let's put it on your team now, I guess.	
3	If your team has not removed	
4	three days, then your estimation windows are	
5	miscalculating what is needed for the abnormal	
6	return, correct?	
7	MS. MECHANIC: Objection.	
8	A. They may or they may or may not. So	
9	depending on the depending on the size of	
10	the sample depending on the size of the	
11	sample period.	
12	Q. Well, your sample periods are	
13	30 days and 90 days, correct?	
14	A. That is correct.	
15	Q. So in either sample, you are	
16	including two days that the news that you are	
17	analyzing is effecting in trying to establish	
18	the baseline against which you are judging it.	
19	MS. MECHANIC: Objection.	
20	A. I'm sorry. Can you repeat again?	
21	Q. Well, in your estimation windows,	
22	you are including two days where you say that	
23	the news affects the price or potentially	
24	affects the price.	
25	A. Three days.	
		316

1	estimate the coefficient for the later date,
2	which it's not, then yes, it could be used.
3	Q. Through the method you are using
4	here?
5	A. I'm sorry?
6	Q. Through the methodology that you are
7	using here in your exhibits?
8	A. That is correct.
9	Q. Dr. Richard, what's the null
10	hypothesis that you are testing with your event
11	study?
12	A. What's the null hypothesis? The
13	null hypothesis is that there is no impact
14	the null hypothesis is that there's no impact
15	of a particular announcement or the particular
16	type of announcement on the price performance.
17	That's a null hypothesis.
18	Q. Does a does the lack of a
19	statistically significant result disprove the
20	null hypothesis?
21	A. Can you repeat the question?
22	Q. Does the lack of a statistically
23	significant result disprove the null
24	hypothesis?
25	A. Are you talking about the type one,
	322